Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) An analyzer for measuring ~~at frequencies within a frequency range~~ the response of an electronic device to a high frequency input signal, the analyzer including:

an active load pull circuit connectable in use to a device to be analyzed, the active load pull circuit including

a feedback circuit arranged (i) to receive an output signal from the device to be analyzed, (ii) to modify the signal, **the modification including limiting the magnitude gain of the feedback circuit at frequencies outside a band of frequencies to essentially no magnitude gain,** **[[and]]** (iii) to feed the modified signal back to the device to be analyzed, **the modified signal fed back comprising a component having a frequency within said band, and (iv)** ~~wherein the feedback circuit is arranged to limit~~ **to control** the magnitude gain of the feedback circuit at **[[all]]** frequencies ~~within the frequency range~~ **inside the band of frequencies to other than essentially no magnitude gain**.

2. (Original) An analyzer according to claim 1, wherein the analyzer is so arranged that the magnitude gain of the feedback circuit at one or more frequencies within the frequency range is able to be adjusted.

3. (Previously Presented) An analyzer according to claim 1, wherein the analyzer is so arranged that the phase change effected by the feedback circuit at one or more frequencies within the frequency range is able to be adjusted.

4. (Previously Presented) An analyzer according to claim 1, wherein the feedback circuit is arranged to restrict the phase change effected by the feedback circuit at all frequencies within the frequency range.

5. (Previously Presented) An analyzer according to claim 1, wherein the feedback circuit is so arranged that it acts as a band filter having a bandwidth covering frequencies within the range.

6. (Previously Presented) An analyzer according to claim 1, wherein the analyzer includes a high frequency band filter circuit arranged to filter signals in or from the feedback circuit before they are fed back to the device, the band filter circuit having a bandwidth covering frequencies within the range.

7. (Previously Presented) An analyzer according to claim 5, wherein the feedback circuit is so arranged that it acts as a band filter having a bandwidth of greater than 10 MHz.

8. (Currently Amended) An analyzer according to **[[any preceding]]** claim 1, wherein the feedback circuit includes a heterodyne filter ring circuit.

9. (Original) An analyzer according to claim 8, wherein the heterodyne filter ring circuit includes a first mixer, a second mixer, and a signal-modifying unit, the heterodyne filter ring circuit being so arranged that in use it receives an input at the first mixer together with a signal having a preselected frequency, and the output from the first mixer is sent via the signal-modifying unit to the second mixer, where it is combined with a signal having a frequency equal to the preselected frequency to produce the output signal of the heterodyne filter ring circuit.

10. (Previously Presented) An analyzer according to claim 1, wherein the feedback circuit includes a signal processor able in use to modify the signal from the device to be analyzed by a preselectable amount.

11. (Original) An analyzer according to claim 10, wherein the signal processor is arranged to process respective signals representative of the I and Q values of a signal.

12. (Previously Presented) An analyzer according to claim 1, wherein the analyzer includes a signal generator arranged to send an input signal to the device to be analyzed.

13. (Previously Presented) An analyzer according to claim 1, wherein the analyzer includes a signal measuring device for measuring loads arising in response to the signals applied to the device to be analyzed.

14. (Currently amended) An active load pull circuit for use in an analyzer for measuring at frequencies within a frequency range the response of an electronic device to a high frequency input signal, the active load pull circuit being connectable in use to a device to be analyzed and including a feedback circuit arranged to receive an output signal from the device to be analyzed, to modify the signal, **the modification including limiting the magnitude gain of the feedback circuit at frequencies outside the range of frequencies**, and to feed the modified signal back to the device to be analyzed, wherein the feedback circuit is arranged to ~~limit~~ **control** the magnitude gain of the feedback circuit at all frequencies within the frequency range.

15. (Previously Presented) An active load pull circuit according to claim 14, wherein the active load pull circuit is so arranged that at least one of (a) the magnitude gain of, and the (b) phase change effected by, the feedback circuit at one or more frequencies within the frequency range is able to be adiusted.

16. (Currently amended) A method of measuring the response of an electronic device to a high frequency input signal, the method including the steps of:

providing an electronic device to be analyzed,

applying a high frequency signal to the device, and

modifying an output signal from the device, **the modification including limiting the magnitude gain of the feedback circuit at frequencies outside a band of frequencies,** and then feeding the modified signal back to the device, thereby forming a feedback loop, and

measuring, at a plurality of frequencies within a frequency range, the response of the device to the signal applied to the device,

wherein the magnitude gain of the feedback loop is ~~limited~~ **controlled** at frequencies ~~within~~ **inside** the frequency range.

17. (Original) A method according to claim 16, wherein the phase change effected by the feedback loop is restricted at frequencies within the frequency range.

18. (Previously Presented) A method according to claim 16, wherein the method inclu-des a step of preselecting the way in which the output signal from the device is modified.

19. (Original) A method according to claim 18, wherein the method includes a step of preselecting a magnitude gain applied to the output signal from the device.

20. (Previously Presented) A method according to claim 18, wherein the method includes a step of preselecting a phase change applied to the output signal from the device.

21. (Previously Presented) A method according to claim 16, wherein the step of modifying the output signal from the device includes filtering out signals having frequencies outside a band of frequencies covering frequencies within the frequency range.

22. (Previously Presented) A method according to claim 16, wherein the fundamental frequency of the signal applied to the device is over 1 GHz.

23. (Previously Presented) A method according to claim 16, wherein the method is repeated and performed in respect of a multiplicity of different modifications of the output signal from the device.

24. (Previously Presented) A method according to claim 16, wherein the method is repeated and performed in respect of a multiplicity of different input signals applied to the device.

25. (Currently Amended) A method of calibrating an analyzer according to claim **[16]** **1**, wherein the calibration method comprising repeating the following steps for a multiplicity of different loads:

applying a high frequency signal at the input of the feedback loop or feedback circuit, and

modifying the applied high frequency signal and feeding the modified signal back to the input to synthesise a load,

measuring, at a plurality of frequencies within a frequency range, the modified signal at the input,

calculating the load represented by the feedback loop or feedback circuit in response to the particular modification made to the applied signal, and storing electronically the results of the measurements against the modifications to the signal.

26. (Previously Presented) A method according to claim 16, wherein the method includes performing a calibration, the performance of the calibration comprising repeating the following steps for a multiplicity of different loads:

applying a high frequency signal at the input of the feedback loop or feedback circuit, and

modifying the applied high frequency signal and feeding the modified signal back to the input to synthesise a load,

measuring, at a plurality of frequencies within a frequency range, the modified signal at the input,

calculating the load represented by the feedback loop or feedback circuit in response to the particular modification made to the applied signal, and storing electronically the results of the measurements against the modifications to the signal,

so that predetermined loads may be applied at the output of the device by selecting an appropriate modification during the step of modifying the signal in accordance with the electronically stored measurements.

27. (Previously Presented) A method according to claim 16, wherein the method is performed with an analyser, the analyzer including:

an active load pull circuit connectable in use to a device to be analysed, the active load pull circuit including

a feedback circuit arranged (i) to receive an output signal from the device to be analyzed, (ii) to modify the signal and (iii) to feed the modified signal back to the device to be analyzed, wherein

the feedback circuit is arranged to limit the magnitude gain of the feedback circuit at all frequencies within the frequency range.

28. (Previously Presented) A method of improving the design of a high frequency high power device or a circuit including a high frequency high power device, the method including the steps of analyzing the behaviour of the device by using the analyzer of claim 1, and then modifying the design of the device or modifying the circuit including the device in consideration of the results of the analyzing of the behaviour of the device.

29. (Original) A method of manufacturing a high frequency high power device or a circuit including a high frequency high power device, the method including the steps of improving the design of a similar existing device or of an existing circuit including such a device by performing the method of claim 28 and then manufacturing the device or the circuit including the device in accordance with the improved design.

30. (Previously Presented) An analyzer for measuring at frequencies within a frequency range the response of an electronic device to a high frequency input signal, the analyzer including:

an active load pull circuit connectable in use to a device to be analyzed, the active load pull circuit including

a feedback circuit arranged

(i) to receive an output signal from the device to be analyzed,

(ii) to downconvert the signal received to a low frequency signal, to modify the low frequency signal, to upconvert the modified low frequency signal to a modified high frequency signal and

(iii) to feed the modified signal back to the device to be analyzed, wherein

the feedback circuit is arranged to limit the magnitude gain of the feedback circuit at all frequencies within the frequency range.

31. (Previously Presented) An analyzer for measuring the response of an electronic device to a high frequency input signal, the analyzer including:

an active load pull circuit connectable in use to a device to be analyzed, the active load pull circuit including

a feedback circuit arranged (i) to receive an output signal from the device to be analyzed, (ii) to modify the signal, the modification including limiting the magnitude gain of the feedback circuit at frequencies outside a band of frequencies, (iii) to feed the modified signal back to the device to be analyzed, the modified signal fed back comprising a component having a frequency within said band, and (iv) the feedback circuit is also arranged to limit the magnitude gain of the feedback circuit at frequencies inside the band of frequencies.

32. (Previously Presented) A method of improving the design of a high frequency high power device or a circuit including a high frequency high power device, the method including the steps of analyzing the behaviour of the device by performing the method of claim 16, and then modifying the design of the device or modifying the circuit including the device in consideration of the results of the analyzing of the behaviour of the device.

33. (Previously Presented) A method of manufacturing a high frequency high power device or a circuit including a high frequency high power device, the method including the steps of improving the design of a similar existing device or of an existing circuit including such a device by performing the method of claim 32 and then manufacturing the device or the circuit including the device in accordance with the improved design.

34. (New) An analyzer for measuring at frequencies within a frequency range the response of an electronic device to a high frequency input signal, the analyzer including:

an active load pull circuit connectable in use to a device to be analyzed, the active load pull circuit including

a feedback circuit comprising a heterodyne filter ring circuit, the feedback circuit arranged (i) to receive an output signal from the device to be analyzed, (ii) to modify the signal and (iii) to feed the modified signal back to the device to be analyzed, wherein the feedback circuit is arranged to limit the magnitude gain of the feedback circuit at all frequencies within the frequency range; and

wherein the heterodyne filter ring circuit includes a first mixer, a second mixer, and a signal-modifying unit, the heterodyne filter ring circuit being so arranged that in use it receives an input at the first mixer together with a signal having a preselected frequency, and the output from the first mixer is sent via the signal-modifying unit to the second mixer, where it is combined with a signal having a frequency equal to the preselected frequency to produce the output signal of the heterodyne filter ring circuit.

35. (New) An analyzer for measuring at frequencies within a frequency range the response of an electronic device to a high frequency input signal, the analyzer including:

an active load pull circuit connectable in use to a device to be analyzed, the active load pull circuit including

a feedback circuit arranged (i) to receive an output signal from the device to be analyzed, (ii) to modify the signal, and (iii) to feed the modified signal back to the device to be analyzed, wherein the feedback circuit is arranged to limit the magnitude gain of the feedback circuit at all frequencies within the frequency range; and

wherein the feedback circuit includes a signal processor able in use to modify the signal from the device to be analyzed by a preselectable amount, the signal processor is arranged to process respective signals representative of the I and Q values of a signal.

36. (New) A calibration method for an analyzer for measuring at frequencies within a frequency range the response of an electronic device to a high frequency input signal, the analyzer including an active load pull circuit connectable in use to a device to be analyzed, the active load pull circuit including a feedback circuit arranged (i) to receive an output signal from the device to be analyzed, (ii) to modify the signal and (iii) to feed the modified signal back to the device to be analyzed, wherein the feedback circuit is arranged to limit the magnitude gain of

the feedback circuit at all frequencies within the frequency range, wherein the calibration method comprises repeating the following steps for a multiplicity of different loads:

applying a high frequency signal at the input of the feedback loop or feedback circuit, and

modifying the applied high frequency signal and feeding the modified signal back to the input to synthesize a load,

measuring, at a plurality of frequencies within a frequency range, the modified signal at the input,

calculating the load represented by the feedback loop or feedback circuit in response to the particular modification made to the applied signal, and storing electronically the results of the measurements against the modifications to the signal.

37. (New) A method of measuring the response of an electronic device to a high frequency input signal, the method including the steps of:

providing an electronic device to be analyzed,

applying a high frequency signal to the device, and

modifying an output signal from the device and then feeding the modified signal back to the device, thereby forming a feedback loop, and

measuring, at a plurality of frequencies within a frequency range, the response of the device to the signal applied to the device,

wherein the magnitude gain of the feedback loop is limited at frequencies within the frequency range; and

wherein the method includes performing a calibration, the performance of the calibration comprising repeating the following steps for a multiplicity of different loads:

applying a high frequency signal at the input of the feedback loop or feedback circuit, and

modifying the applied high frequency signal and feeding the modified signal back to the input to synthesise a load,

measuring, at a plurality of frequencies within a frequency range, the modified signal at the input,

calculating the load represented by the feedback loop or feedback circuit in response to the particular modification made to the applied signal, and storing electronically the results of the measurements against the modifications to the signal,

so that predetermined loads may be applied at the output of the device by selecting an appropriate modification during the step of modifying the signal in accordance with the electronically stored measurements.